

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 2, 2018/2019

### BIE2034 – INTERMEDIATE MACROECONOMICS

(All sections / Groups)

2 MARCH 2019

2.30 p.m. – 4.30 p.m.

(2 Hours)

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#### INSTRUCTIONS TO STUDENTS

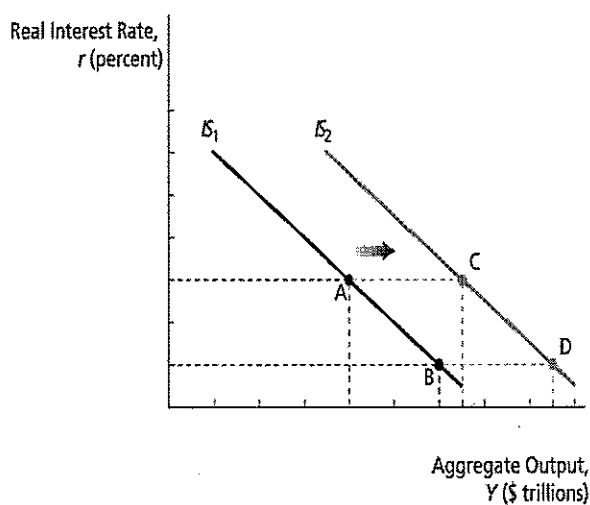
1. This Question paper consists of 7 pages including the cover page, with 2 sections only.  
**Section A** – Twenty (20) Multiple Choice Questions  
**Section B** – Three (3) Structured Questions
2. Attempt **ALL** questions in both **Sections A and B**. The distribution of the marks for each question is given.
3. Answer **Section A** in the MCQ answer sheet provided and **Section B** in the answer booklet provided.

**SECTION A: MULTIPLE CHOICE QUESTIONS (40 MARKS)**

1. In a macroeconomic model designed to explain why some countries grow faster than others, which of these variables is likely to be *endogenous*?
- A. investment
  - B. economic policies
  - C. geographic size
  - D. population
2. In a model of the saving rate, which of these relationships is most crucial?
- A. the effect of the saving rate on government spending
  - B. the effect of government spending on the saving rate
  - C. the effect of the saving rate on taxes
  - D. the effect of taxes on the saving rate
3. An economy's production function is  $Y = AK^{0.25}L^{0.75}$ , and the economy's total output in equilibrium is \$800 billion. Total *capital* income in this economy is \_\_\_\_\_.
- A. \$200 billion
  - B. \$25 billion
  - C. \$750 billion
  - D. \$267 billion
4. Suppose consumption is \$500 billion, investment is \$120 billion, government purchases equal \$90 billion, and net exports are negative \$20 billion. The saving rate  $\left(\frac{S}{Y}\right)$  is \_\_\_\_\_.
- A. 20%
  - B. 83.3%
  - C. 14.5%
  - D. 3%
5. In the quantity theory of money, which of these variables is *endogenous*?
- A. the price level
  - B. the velocity of money
  - C. real output
  - D. the money supply

Continued...

6. The proposition that the amount of goods and services produced in an economy in the long run is not affected by the price level is known as the \_\_\_\_\_.
- A. neutrality of money
  - B. classical dichotomy
  - C. quantity theory of money
  - D. Fisher effect
7. The IS curve \_\_\_\_\_.
- A. traces out the points at which the goods market is in equilibrium
  - B. tells us how consumption expenditures fall as the real interest rate rises
  - C. tells us that as the real interest rate rises planned expenditures go down leading to increases in savings that satisfy the goods market equilibrium
  - D. all of the above
8. Total planned expenditure (equals income) is 13,500, autonomous consumption expenditure is 600, the marginal propensity to consume is 0.8, government purchases are 2,700, taxes are 2,500 and planned investment spending is 2,900. Net exports is \_\_\_\_\_.
- A. 3,840
  - B. negative 1,500
  - C. negative 1,380
  - D. negative 1,340

**Graph 1****Continued...**

9. On **Graph 1** above, unplanned inventory investment occurs if the economy is moving from point \_\_\_\_\_ to point \_\_\_\_\_.
- A. D; C
  - B. C; B
  - C. B; A
  - D. all of the above
10. In a fixed exchange rate regime, the value of a currency is pegged to \_\_\_\_\_.
- A. an anchor currency.
  - B. a currency board.
  - C. a dirty float.
  - D. an interest rate standard such as the Treasury bill rate in the U.S.
11. According to the real business cycle model, a rightward shift in the long-run aggregate supply schedule would be caused by \_\_\_\_\_.
- A. a negative supply shock.
  - B. an increase in aggregate demand.
  - C. a positive supply shock.
  - D. a decrease in aggregate demand.
12. Given the aggregate production function  $Y = A K^{0.3} L^{0.7}$ , the Solow residual equals \_\_\_\_\_ when  $Y$  is 60,  $K = 5$  and  $L = 5$ .
- A. 2.4
  - B. 35
  - C. 25
  - D. 12
13. Price flexibility is a key feature of \_\_\_\_\_.
- A. traditional Keynesian theory.
  - B. new Keynesian theory.
  - C. real business cycle theory.
  - D. traditional Keynesian, new Keynesian and real business cycle theory.
14. One of the primary objections to the new classical model is that \_\_\_\_\_.
- A. firms could easily get information about price movements and so would not be fooled for very long.
  - B. price is negatively related to quantity demanded, but positively related to quantity supplied.
  - C. business cycles are relatively brief in duration.
  - D. it failed to incorporate rational expectations into its presentation.

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15. In the aggregate production function  $Y = A K^{0.3} L^{0.7}$ , real business cycle theory treats \_\_\_\_\_ as the key independent variable.
- A. potential output
  - B. productivity
  - C. the capital stock
  - D. the labor input
16. The IS curve is  $Y = 20 - 1.5r$ , and the aggregate demand curve is  $Y = 15.5 - 0.3\pi$ . When the inflation rate is 3 percent, output is \_\_\_\_\_.
- A. 20
  - B. 14.6
  - C. 9.5
  - D. 3.6
17. The liquidity preference theory distinguishes between \_\_\_\_\_.
- A. nominal and real quantities
  - B. money and financial assets
  - C. buying goods and earning interest income
  - D. all of the above
18. Suppose an item sells for \$125 in the United States and for 62,500 pesos in Chile. According to the law of one price, the nominal exchange rate (pesos/dollar) should be \_\_\_\_\_.
- A. 31,313
  - B. either \$125, or 62,500 pesos, but not both
  - C. 0.002
  - D. 500
19. The standard IS curve is adjusted in new Keynesian theory to account for \_\_\_\_\_.
- A. the forward-looking behavior of households and firms.
  - B. the difference between real and nominal variables.
  - C. changes in GDP, or Gross Domestic Product.
  - D. the impact of rising national debt
20. Long-run aggregate supply shocks are a source of business cycle fluctuations in \_\_\_\_\_.
- A. traditional Keynesian and new Keynesian theory.
  - B. new Keynesian and real business cycle theory.
  - C. real business cycle and traditional Keynesian theory.
  - D. traditional Keynesian, new Keynesian and real business cycle theory.

Continued...

**SECTION B: STRUCTURED QUESTIONS (60 MARKS)****QUESTION 1 (20 MARKS)**

- a) Develop a simple model of inflation by identifying at least two exogenous variables and describing, briefly, how the value of these exogenous variables will impact the rate of increase in the overall level of prices in the economy. (5 marks)
- b) i) According to the economy's *self-correcting mechanism*, how does the economy return to potential output following a negative demand shock? (3 marks)
- ii) With reference to b(i) how does the recovery process differ if the government implement an economic stimulus policy? (3 marks)
- c) The demand for money is given by:  
 $M^d = 0.5Y - 2000r$
- i. If the income level is  $Y = 1000$ , and the interest rate is  $r = 10\%$ , what is the demand for money? (2 marks)
- ii. What is the equilibrium level of interest rates when the supply of money is equal to 200? (2 marks)
- iii. What happens to the equilibrium rate of interest when increase in the money supply to 400? (2 marks)
- d) Suppose real output is 12,500, and the demand for real money balances is  $\frac{M^d}{P} = \frac{Y}{4} - 125i$ .
- i. If the equilibrium interest rate is 7 percent, calculate the money supply (1.5 marks)
- ii. If the central bank sets the interest rate at 8 percent, what is the new money supply (1.5 marks)

**QUESTION 2 (20 MARKS)**

- a) Using the IS-LM model, explain how the equilibrium rate of interest and level of output will respond to the following:
- i) A fall in corporate profits. (3 marks)
- ii) A house price boom. (3 marks)
- iii) A program of investment in new ATMs. (3 marks)

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- b) An open economy with zero capital mobility consists of the following components:

$$C = 2000 + 0.6(Y - T)$$

$$I = 300 - 3000r$$

$$G = 300$$

$$T = 300$$

$$NX = 400 - 200S$$

$$M = 500$$

$$M_d = 0.2Y - 1000r$$

Where  $Y$  is output,  $C$  is consumption,  $I$  is investment,  $r$  is the interest rate,  $T$  is the lump sum tax,  $G$  is government spending,  $NX$  is net exports,  $S$  is the nominal exchange rate (expressed in terms of foreign currency/domestic currency),  $M$  is the money supply and  $M_d$  is the demand for money.

For this economy, derive the IS, LM schedules.

(5 marks)

- c) How will a change in the world interest rate affect the equilibrium level of output when:
- Capital mobility is low and exchange rates are fixed? (3 marks)
  - Capital mobility is perfect and exchange rates are flexible? (3 marks)

### QUESTION 3 (20 MARKS)

- How does real business cycle theory explain fluctuations in output and employment? (7 marks)
- How do the new Keynesian and real business cycle models differ on the ability of inflationary expectations to affect output? (6 marks)
- Suppose the government announces that it will bring the federal budget deficit to zero, over the next ten years, with no change in tax rates. Describe the effects of such a policy according to the **three** business cycle models, assuming that the policy is fully credible. (7 marks)

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